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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,941	01/22/2004	Trevor J. Darrell	MIT-154PUS	5964
22494 7590 01/15/2008 DALY, CROWLEY, MOFFORD & DURKEE, LLP SUITE 301A 354A TURNPIKE STREET CANTON, MA 02021-2714			EXAMINER MISLEH, JUSTIN P	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 01/15/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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# Office Action Summary

Application No.

10/762,941

Applicant(s)

DARRELL ET AL.

Examiner

Justin P. Misleh

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892).  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

**Note:** The Examiner for the present application has changed.

#### *Response to Arguments*

1. Applicant's arguments filed October 19, 2007 have been fully considered but they are not persuasive.
2. Applicant argues, "Applicants submit that Claim 1 is patentably distinct over Noda et al, since the cited reference neither describes nor suggests 'a camera to capture an image; a wireless communication device, coupled to the camera and to a wireless network, to communicate the image to a server with an existing database of images to find similar images located on the server by comparing the image with images in the database and to provide any similar images and associated hyperlink to the mobile device; and a processor, coupled to the wireless communication device, to process found database records related to similar images' as set forth in Claim 1" (emphasis added by Applicant).
3. Applicant additionally argues, "Applicants submit that Claim 9 is distinct over Noda et al, since the cited reference neither describes nor suggests 'a camera ...; a mobile communication device, coupled to the camera and to a wireless network, to communicate the image to a server with existing image files to find similar images by locating and comparing the captured image with other existing image files; and a user interface, coupled to the mobile communication device, to communicate to an user any results of found similar images; and a computer network including the wireless network and a wired network; a server, connected to the computer network, to store images of interest and to search for additional images of interest located on

other computers connected to the network when an image of interest is not located on the server;  
and a plurality of computers, each computer have a plurality of computer files and connected to the computer network, at least one of the computer files having an image similar to the captured image and when viewed includes associated text describing an object in the image” (emphasis added by Applicant).

4. Applicant additionally argues, “Applicants submit that Claim 25 is distinct over Noda et al, since the cited reference or the other references neither describes nor suggests ‘..., a second computer readable program code stored on the storage medium being operative to interact with the processor to communicate with a server with multiple image files and to search said image files for a similar image similar to the captured image by comparing the captured image with other images and to cause said server to provide to the handheld device a hyperlink to the similar image; ....’” (emphasis added by Applicant).

5. Applicant additionally argues, “Applicants submit that Claim 26 is distinct over Noda et al, since the cited reference or the other references neither describes nor suggests ‘providing a database of images, each image having an associated URL that includes said image and a description of the image; comparing an image of an unknown location with images from the database of images and providing a list of images and corresponding URL of possible matching images; and reviewing the images in the list of possible matching images until the correct location is identified.’” (emphasis added by Applicant).

6. First, the Examiner respectfully notes Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable

invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

7. However, the Examiner respectfully disagrees with Applicant's position. As described by item 3 (Image Retrieval System of Flowers), Noda uses characteristics entered by a user to generate a binary image of the captured image (see 3.1), then calculates the characteristics of shape using a circularity measure (as defined by equation 1; see 3.2), then calculates the characteristics of color using a center of gravity calculation (see 3.3). Noda combines these characteristics into a table (see Table 1) and compares them to characteristics of other images in the database to find a match(s) (see 3.4). Once a match(s) is found, the image(s) is displayed on a webpage and the matched image(s) and URL of the webpage is sent to the user (see 3.5 and 2).
8. Noda clearly teaches each of the limitation emphasized above with respect to each of Claims 1, 9, 25, and 26. Therefore, these claims are not patentably distinct from Noda.

### *Drawings*

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the description: 24a, 24b, 26a, and 26b (see page 6).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1 – 3, 5, 6, and 25 – 28** are rejected under 35 U.S.C. 102(b) as being anticipated by Noda et al. (Cosmos: Convenient Image Retrieval System of Flowers for Mobile Computing Situations).

12. For **Claim 1**, Noda et al. explicitly teach:

A mobile deixis device (Figure 1) comprising:

(a) a camera to capture an image (digital camera and PDA, Figure 1);

(b) a wireless communication device (PHS, Figure 1), coupled to the camera and to a wireless network (WWW server, Figure 1), to communicate the image to a server with an existing database of images to find similar images (Flower Database, Figure 1) located on the server by comparing the image with images in the database and to provide any similar images and associated hyperlink to the mobile deixis device (see Examiner's explanation below); and

(c) a processor (image retrieval, Figure 1), coupled to the wireless communication device, to process found database records related to similar images (pages 26 and 27, 3-3.4).



The Examiner respectfully notes, as described by item 3 (Image Retrieval System of Flowers), Noda uses characteristics entered by a user to generate a binary image of the captured image (see 3.1), then calculates the characteristics of shape using a circularity measure (as defined by equation 1; see 3.2), then calculates the characteristics of color using a center of gravity calculation (see 3.3). Noda combines these characteristics into a table (see Table 1) and compares them to characteristics of other images in the database to find a match(s) (see 3.4). Once a match(s) is found, the image(s) is displayed on a webpage and the matched image(s) and URL of the webpage is sent to the user (see 3.5 and 2).

13. As for **Claim 2**, Noda et al. explicitly teach:

The mobile deixis device as recited in Claim 1 comprising a display to view found database records and the found database records comprising web pages including images (PDA browser, Figure 1, Figure 5, page 28, 3.5).

14. As for **Claim 3**, Noda et al. explicitly teach:

The mobile deixis device as recited in Claim 1 comprising:

(a) a storage medium coupled to the processor (in order to perform the operations on page 26 and 27, 3-3.4 and extracting characteristics in Figure 2, it is inherent that there must be a memory and or storage medium); and

(b) a plurality of programs stored (it is inherent that these processing commands must be stored, page 25, 2 describes the operation of the invention, which includes control of the Cosmos device) in the storage medium operative to interact with the processor and the wireless communication device to control the operation of the mobile deixis device, comprising:

(i) a first program of the plurality of programs stored on the storage medium being operative to interact with the processor to capture the image from the camera (first we photograph a flower with a digital camera, then we send the image to a server, see page 25, 2);

(ii) a second program of the plurality of programs stored on the storage medium being operative to interact with the processor to communicate with at least one database to find a similar image similar to the captured image (sent characteristics and the extracted characteristics are used in order to retrieve objective images of flowers, see page 25, 2, these images are retrieved from the flower database as seen in Figure 1); and

(iii) a third program of the plurality of programs stored on the storage medium being operative to interact with the processor to provide to a display a plurality of similar images and maintaining an associated hyperlink for each similar image (and the result of the retrieval is displayed on a web page constructed server. We look the page by a browser on the PDA and confirm the results, page 25, 2.1, see also page 28, 3.5 and Figure 5).

15. As for **Claim 5**, Noda et al. explicitly teach:

The mobile device as recited in Claim 1 comprising:

(a) a storage medium coupled to the processor (in order to perform the operations on page 26 and 27, 3-3.4 and extracting characteristics in Figure 2, it is inherent that there must be a memory and/or storage medium); and

(b) a plurality of programs stored (it is inherent that these processing commands must be stored, page 25, 2 describes the operation of the invention, which includes control of the Cosmos



device) in the storage medium operative to interact with the processor and the wireless communication device to control the operation of the mobile deixis device, comprising:

(i) a first program of the plurality of programs stored on the storage medium being operative to interact with the processor to capture the image from the camera (first we photograph a flower with a digital camera, then we send the image to a server, see page 25, 2);

(ii) a second program of the plurality of programs stored on the storage medium being operative to interact with the processor to communicate with at least one computer having a database of images to cause the at least one computer to search the database of images to find a similar image similar to the captured image (sent characteristics and the extracted characteristics are used in order to retrieve objective images of flowers, see page 25, 2, these images are retrieved from the flower database as seen in Figure 1, database is interpreted as computer in that it has input, output and has to process in order to retrieve images from CD-ROMs mentioned on page 28, 4); and

(iii) a third program of the plurality of programs stored on the storage medium being operative to interact with the processor to provide to a display of a plurality of similar images and maintaining an associated hyperlink for each similar image (and the result of the retrieval is displayed on a web page constructed server. We look the page by a browser on the PDA and confirm the results, see also page 28, 3.5 and Figure 5).

16. As for **Claim 6**, Noda et al. explicitly teach:

The mobile deixis device as recited in Claim 1 comprising:

(a) a storage medium coupled to the processor (in order to perform the operations on page 26 and 27, 3-3.4 and extracting characteristics in Figure 2, it is inherent that there must be a memory and or storage medium); and

(b) a plurality of programs stored (it is inherent that these processing commands must be stored, page 25, 2 describes the operation of the invention, which includes control of the Cosmos device) in the storage medium operative to interact with the processor and the wireless communication device to control the operation of the mobile deixis device, comprising:

(i) a first program of the plurality of programs stored on the storage medium being operative to interact with the processor to capture the image from the camera (first we photograph a flower with a digital camera, then we send the image to a server, see page 25, 2);

(ii) a second program of the plurality of programs stored on the storage medium being operative to interact with the processor to communicate with at least one computer with web pages having images to search the images to find a similar image similar to the captured image (sent characteristics and the extracted characteristics are used in order to retrieve objective images of flowers, see page 25, 2, these images are retrieved from the flower database as seen in Figure 1, database is interpreted as computer in that it has input, output and has to process in order to retrieve images from CD-ROMs mentioned on page 28, 4, Figure 5 demonstrates the web pages that are returned from the computer); and

(iii) a third program of the plurality of programs stored on the storage medium being operative to interact with the processor to provide to a display of a plurality of

similar images and maintaining an associated hyperlink for each similar image (and the result of the retrieval is displayed on a web page constructed server. We look the page by a browser on the PDA and confirm the results, see also page 28, 3.5 and Figure 5).

17. For **Claim 25**, Noda et al. explicitly teach:

A storage medium (in order to perform the operations on page 26 and 27, 3-3.4 and extracting characteristics in Figure 2, it is inherent that there must be a memory and or storage medium) comprising:

a first computer readable program code stored on the storage medium being operative to interact with a processor in a handheld device to capture an image from a camera (first we photograph a flower with a digital camera, then we send the image to a server, which contains the memory, see page 25, 2);

a second computer readable program code stored on the storage medium being operative to interact with the processor to communicate with a server with multiple image files and to search said image files for a similar image similar to the captured image (sent characteristics and the extracted characteristics are used in order to retrieve objective images of flowers, see page 25, 2, these images are retrieved from the flower database as seen in Figure 1, database is interpreted as computer in that it has input, output and has to process in order to retrieve images from CD-ROMs mentioned on page 28, 4) by comparing the captured image with other images and to cause said server to provide to the handheld device a hyperlink to the similar image (see Examiner's explanation below); and

a third computer readable program code stored on the storage medium being operative to interact with the processor to provide to an user interface a plurality of similar images and maintaining an associated hyperlink for each similar image (and the result of the retrieval is displayed on a web page constructed server. We look the page by a browser on the PDA and confirm the results, see also page 28, 3.5 and Figure 5).

The Examiner respectfully notes, as described by item 3 (Image Retrieval System of Flowers), Noda uses characteristics entered by a user to generate a binary image of the captured image (see 3.1), then calculates the characteristics of shape using a circularity measure (as defined by equation 1; see 3.2), then calculates the characteristics of color using a center of gravity calculation (see 3.3). Noda combines these characteristics into a table (see Table 1) and compares them to characteristics of other images in the database to find a match(s) (see 3.4). Once a match(s) is found, the image(s) is displayed on a webpage and the matched image(s) and URL of the webpage is sent to the user (see 3.5 and 2).

18. For **Claim 26**, Noda et al. explicitly teach:

A method for identifying a location comprising the steps of:

(i) providing a database of images, each image having an associated URL that includes said image and a description of the image (flower database, Figure 1, see display in Figure 5, and page 28, 3.5);

(ii) comparing an image of an unknown location with images from the database of images and providing a list of images and corresponding URL of possible matching images (comparing characteristics, Figure 2; see Examiner's explanation below); and

(iii) reviewing the images in the list of possible matching images until the correct location is identified (page 25, 2.1, paragraph 3).

The Examiner respectfully notes, as described by item 3 (Image Retrieval System of Flowers), Noda uses characteristics entered by a user to generate a binary image of the captured image (see 3.1), then calculates the characteristics of shape using a circularity measure (as defined by equation 1; see 3.2), then calculates the characteristics of color using a center of gravity calculation (see 3.3). Noda combines these characteristics into a table (see Table 1) and compares them to characteristics of other images in the database to find a match(s) (see 3.4). Once a match(s) is found, the image(s) is displayed on a webpage and the matched image(s) and URL of the webpage is sent to the user (see 3.5 and 2).

19. As for **Claim 27**, Noda et al. explicitly teach:

The method for identifying a location as recited in Claim 26 wherein the comparing step includes comparing at least one of energy spectrum data, color histogram data, primitive filter data, and local invariant data (pages 26-38, 3-3.4 mentions color characteristic extraction).

20. As for **Claim 28**, Noda et al. explicitly teach:

The method for identifying a location as recited in claim 26 wherein the comparing step comprises at least one of the techniques including a least square matching technique, a normalizing the image technique, an eigen value technique, a matching histogram of image feature technique and an image matching engine with transformation technique (pages 27-28, 3.4).

***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. **Claims 4, 7, 9 – 22, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. in view of Aarnio (US 6,522,889).

23. As for **Claim 4**, Noda et al. explicitly teach:

The mobile device as recited in claim 3, including a second program being operative to interact with the processor to communicate with at least one server database (sent characteristics and the extracted characteristics are used in order to retrieve objective images of flowers, see page 25, 2, these images are retrieved from the flower database as seen in Figure 1).

However, Noda et al. do not explicitly teach that the database can search further databases for a similar image similar to the captured image.

In the same field of endeavor, Aarnio teaches a method and apparatus for providing precise location information through a communications network (Figures 1 and 3). Aarnio



further teaches that the database to be accessed is a computer network 18, which may be the Internet, or World Wide Web (column 2, lines 57-60), which includes several databases that can then be checked.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the computer network found in Aarnio as the database in Noda et al. in order to pinpoint an exact location of the image by using the vast sources of the internet (column 1, lines 35-39).

24. As for **Claim 7**, Noda et al. explicitly teach:

The mobile deixis device as recited in Claim 3 wherein the at least one database includes a web site dispersed within the Internet (page 25, 2.1, end of paragraph 2) and a plurality of programs stored in the storage medium (it is inherent that these processing commands must be stored, page 25, 2 describes the operation of the invention, which includes control of the Cosmos device).

However, Noda et al. do not explicitly teach a program being operative to interact with the processor to identify any keywords linked to each similar image and a program being operative to interact with the processor to initiate a further search using the keywords to find additional similar images.

In the same field of endeavor, Aarnio teaches a method and apparatus for providing precise location information through a communications network (Figures 1 and 3). Aarnio further teaches a processor having a program in which digital image information can be searched directly or can be converted to binary text and these words can be further searched on the

internet in order to find a location in accordance with the captured image (column 3, lines 50-67 through column 4, lines 1-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the text searching on the internet with words generated from the images found in Aarnio into the programs stored in the memory found in Noda et al. in order to enable the user to access location information such as street maps, locations of buildings, landmarks, etc. (column 4, lines 6-8).

25. For **Claim 9**, Noda et al. explicitly teach:

A system to provide location awareness services comprising:

(a) a handheld device (digital camera, PDA, PHS, Figure 1) comprising:

- (i) a camera to capture an image of an location (digital camera, Figure 1);
- (ii) a mobile communication device (PHS, Figure 1), coupled to the camera and to a wireless network (WWW sever, Figure 1), to communicate the image to a server with existing image files to find similar images (page 25, abstract, lines 8-12) by locating and comparing the captured image with other existing image files; and
- (iii) a user interface (PDA, Figure 1), coupled to the mobile communication device, to communicate to an user any results of found similar images (page 28, 3.5 and Figure 5); and

(b) a computer network including the wireless network (WWW server, Figure 1) and a wired network (flower database, Figure 2);

(c) a server (see Figure 1), connected to the computer network, to store images of interest; and

(c) a plurality of computers (WWW server and flower database, Figure 1), each computer have a plurality of computer files and connected to the computer network (process information files and flower information files respectively), at least one of the computer files having an image similar to the captured image and when viewed includes associated text describing an object in the image (page 26, paragraph 3, lines 8-13, see also Figure 5).

The Examiner respectfully notes, as described by item 3 (Image Retrieval System of Flowers), Noda uses characteristics entered by a user to generate a binary image of the captured image (see 3.1), then calculates the characteristics of shape using a circularity measure (as defined by equation 1; see 3.2), then calculates the characteristics of color using a center of gravity calculation (see 3.3). Noda combines these characteristics into a table (see Table 1) and compares them to characteristics of other images in the database to find a match(s) (see 3.4). Once a match(s) is found, the image(s) is displayed on a webpage and the matched image(s) and URL of the webpage is sent to the user (see 3.5 and 2).

However, Noda et al. do not explicitly teach to search for additional images of interest located on other computers connected to the network when an image of interest is not located on the server.

In the same field of endeavor, Aarnio teaches a method and apparatus for providing precise location information through a communications network (Figures 1 and 3). Aarnio further teaches that the database to be accessed is a computer network 18, which may be the Internet, or World Wide Web (column 2, lines 57-60), which includes several databases that can then be checked.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the computer network found in Aarnio as the database in Noda et al. in order to pinpoint an exact location of the image by using the vast sources of the internet (column 1, lines 35-39).

26. As for **Claim 10**, Noda et al explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein the user interface comprises a display (PDA, browser Figure 1, see also Figure 5).

27. As for **Claim 11**, Noda et al explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein the user interface comprises a computer connection (PDA connects to computers wirelessly through PHS, Figure 1).

28. As for **Claim 12**, Noda et al. explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein the associated text describes features of the object in the image including geographical location of the object (page 28, 3.5).

29. As for **Claim 13**, Noda et al. explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein the associated text describes features of the object in the image including a description and historical facts regarding the object (page 28, 3.5).

30. As for **Claim 14**, Noda et al. explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein the associated text includes a uniform resource locator (URL) (Figure 5, the word detail is considered the URL because when it is clicked the web address corresponding to the link is opened and seen in Figure 6).

31. As for **Claim 15**, Noda et al explicitly teach:

The system to provide location awareness services as recited in Claim 9, wherein at least one of the computers includes a plurality of computer files having images of fields of interest (flower database Figure 1).

However, Noda et al. do not explicitly teach that the database has information of locations of interest located within a predetermined radius about a geographical location.

In the same field of endeavor, Aarnio teaches a method and apparatus for providing precise location information through a communications network (Figures 1 and 3). Aarnio further teaches a server service 24 that provides information to the user about the surroundings in the geographical region (column 4, lines 33-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the information about the geographical surroundings found in Aarnio into the images found in the database of Noda et al. in order to provide a convenience for the user such as in a case described in column 4, lines 38-43.

32. As for **Claim 16**, the combination of Noda et al. in view of Aarnio, as applied to claim 15, further teaches the system to provide location awareness services as recited in Claim 15 wherein the computer having a plurality of computer files having images of objects of interest located within a predetermined radius about a geographical location (column 4, lines 33-38,

Aarnio) was previously trained to find common objects known to be of interest (page 26-28, 3-3.5 explains the finding of common images).

33. As for **Claim 17**, Noda et al. explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein at least one of the computers includes at least one computer file having an image of an object of known interest and an associated image of an object of less recognized interest within a predetermined radius about a geographical location of the known interest object (section 3.1 describes the extraction of the flower, which is the isolation of the image and at the same time the isolation of the surroundings, therefore it is inherent that the surroundings can be used to identify an object of less interest using the same methods describe in the experimentation with real images 4.1) to aid a user in finding the object of less recognized interest.

34. As for **Claim 18**, Noda et al. explicitly teach:

The system to provide location awareness services as recited in Claim 9 wherein at least one of the computers includes at least one computer file having an image of an object of known interest and an associated image of an object of less recognized interest within the field of view of the known interest object (section 3.1 describes the extraction of the flower, which is the isolation of the image and at the same time the isolation of the surroundings, therefore it is inherent that the surroundings can be used to identify an object of less interest using the same methods describe in the experimentation with real images 4.1) to aid a user in finding the object of less recognized interest.



35. As for **Claim 19**, Noda et al explicitly teach the system to provide location awareness services as recited in Claim 9, which includes at least one computer (flower database Figure 1).

However, Noda et al. do not teach that the computer has the capability of searching other computers to find matching files.

In the same field of endeavor, Aarnio teaches a method and apparatus for providing precise location information through a communications network (Figures 1 and 3). Aarnio further teaches that the database to be accessed is a computer network 18, which may be the Internet, or World Wide Web (column 2, lines 57-60), which includes several computers that can then be checked.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the computer network found in Aarnio as the database in Noda et al. in order to pinpoint an exact location of the image by using the vast sources of the internet (column 1, lines 35-39).

36. As for **Claim 20**, the combination of Noda et al. in view of Aarnio, as applied to claim 19, further teaches that the text that is found describing a matching image is communicated to the handheld device (page 25, 2.1, end of second paragraph).

37. As for **Claim 21**, the combination of Noda et al. in view of Aarnio, as applied to claim 19, further teaches that the text is returned to the computer that began the search (Figure 4, in Aarnio, shows that the information that is found is returned to the mobile system, which is the computer that began the search).

38. As for **Claim 22**, the combination of Noda et al. in view of Aarnio, as applied to claim 21 above further teaches the system to provide location awareness services as recited in Claim 21

wherein the computer that initiated the search is capable of comparing the original image with images returned in the computer file having text matching the associated text describing the object in the image (see figures 5 and 6, the PDA provides the user with the comparison of images that resulted from the original computer, database, to the image).

39. As for **Claim 24**, the combination of Noda et al. in view of Aarnio, as applied to claim 19, further teaches the system to provide location awareness services as recited in Claim 19 wherein at least one of the computers includes at least one computer file having an image of an object of known interest and an associated image of an object of less recognized interest within the field of view of the known interest object (section 3.1 describes the extraction of the flower, which is the isolation of the image and at the same time the isolation of the surroundings, therefore it is inherent that the surroundings can be used to identify an object of less interest using the same methods describe in the experimentation with real images 4.1) to aid a user in finding the object of less recognized interest all located within a predetermined radius about a geographical location.

40. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. in view of Reed (US/2005/0113113).

41. As for **Claim 8**, Noda et al. explicitly teach the mobile deixis device as recited in claim 3 including programs stored in the storage medium operative to interact with the processor and the mobile communication device that are known to eliminated images based on comparison with other images, non matches.

However, Noda et al. do not explicitly teach that the device includes a GPS system to identify the geographical location of the device and be used to eliminate certain matches found.

In the same field of endeavor, Reed teaches an enhanced wireless phone (Figure 2). Reed further teaches that this wireless phone has a GPS system 26, which is described in paragraph [0114]. The GPS system locates the user and inherently would provide coordinates that could narrow down the image matching process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the GPS capabilities of the mobile phone found in Reed into the Cosmos device found in Noda et al. in order to pinpoint exact locations and provide the user with the ease of mind of always knowing their location.

42. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. in view of Aarnio (US 6,522,889) and further in view of Reed (US/2005/0113113).

43. As for **Claim 23**, the combination of Noda et al. in view of Aarnio teaches the system to provide location awareness services as recited in claim 15.

However, the combination does not explicitly teach that the system includes a GPS system receiver to identify the geographical location of the mobile communication device and help eliminate non-useful images.

In the same field of endeavor, Reed teaches an enhanced wireless phone (Figure 2). Reed further teaches that this wireless phone has a GPS system 26, which is described in paragraph

[0114]. The GPS system locates the user and inherently would provide coordinates that could narrow down the image matching process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the GPS capabilities of the mobile phone found in Reed into the system found in the combination of Noda et al. in view of Aarnio in order to pinpoint exact locations and provide the user with the ease of mind of always knowing their location.

### ***Conclusion***

44. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

45. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.


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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Misleh  
Examiner, GAU 2622  
January 3, 2008

  
LIN YE  
SUPERVISORY PATENT EXAMINER